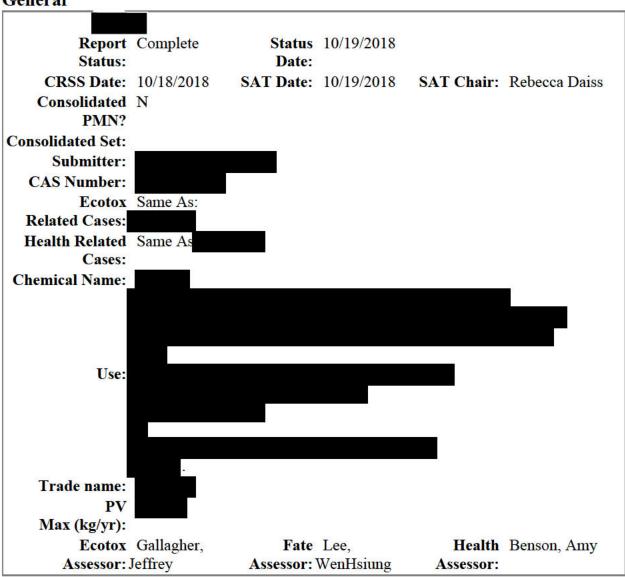
SAT Report for Case # P-18-0379

General



Physical Chemical Information

Molecular Weight:	Physical State - Neat:	(est.)		
Percent 500:	Percent 1000:			
Melting Point (Measured):	Melting Point (est):		MPD (EPI):	
Vapor Pressure:	Vapor Pressure (est):	<0.000001	VP (EPI):	
Water Solubility:	` '	<0.000001	Water Solubility (EPI):	
Log Kow:			Log Kow (EPI):	
Log P:	Log P Comment:			

SAT Concern

Ecotox Rating 1	Ecotox	
(1):	Rating	
	Comment	
	(1):	
Ecotox	Ecotox	
Rating (2):	Rating	
	Comment	
	(2):	
Health Rating 1-2	Health	
(1):	Rating	
	Comment	
	(1):	
Health Rating	Health	
(2):	Rating	
	Comment	
	(2):	

PBT Ratings

Persistence	Bioaccumulation	Toxicity	Comments
3	1	1	

```
Exposure
Based Review
(Health)?
Exposure Based N
Review
(Ecotox)?
SAT IRR- E S LUNG SENS
Keywords:
```

```
Fate Assessment P-18-0379
     Summary: FATE: MW = with < 500 and
                < 1000
                Solid
                S = Negl.
                VP < 1.0E-6 torr at 25 °C (E)
                BP
                > 400 °C (E)
                H < 1.00E-8 (E)
                POTW removal (%) = 90 \text{ via}
                sorption
                Time for complete ultimate aerobic biodeg > mo
                Sorption
                to soils/sediments = v.strong
                PBT Potential: P3B1
                FATE: Migration to
                ground water = negl
     Removal in 90
  WWT/POTW
      (Overall):
```

Condition	Rating Values	Comment
	w/ Rating Description	
WWT/POTW	3	
Sorption:		
WWT/POTW	4	
Stripping:		
Biodegradation	4	
Removal:		
Biodegradation		
Destruction:		
Aerobic Biodeg	4	
Ult:		
Aerobic Biodeg		
Prim:		

Condition	Rating Values	Comment
	w/ Rating Description	
Anaerobic Biodeg Ult:	4	
Anaerobic Biodeg Prim:		
Hydrolysis (t1/2 at pH 7,25C) A:		
Hydrolysis (t1/2 at pH 7,25C) B:		
Sorption to Soils/Sediments:	1	
Migration to Ground Water:	1	
Photolysis A, Direct:		
Photolysis B, Indirect:		
Atmospheric Ox A, OH:		
Atmospheric Ox B, O3:		

Health

Assessment

Test Data Submitted

T4 D-4-	
Test Data	
Submitted:	

Ecotox Assessment

Test organism	Test	Test	Predicted	Measured	Comments
4000	Type	Endpoint			
Fish	96-h	LC50	*	20	**
Daphnid	48 -h	LC50	*		
Green Algae	96-h	EC50	*		
Fish	-	Chronic Value	*		
Daphnid	-	Chronic Value	*		
Green Algae	=	Chronic Value	*		

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute				An acute
Acquatic:				COC was not calculated, because the
20000				acute toxicity values show no effects
				at saturation.
Chronic				A chronic
Acquatic:				COC was not calculated, because the
				acute toxicity values show no effects
				at saturation.

Ecotox Route of No releases to Exposure? water

Factors	Values	Comments		
SARs:	Polycationic			
	Polymers			
SAR Class: F	SAR Class: Polymers-cationic-			
	insoluble-			
	A-N			
TSCA NCC	A NCC Polycationic			
Category?	Polymers			

Recommended Testing

Ecotox

Value Comments

Predictions are based on the negligible water solubility of P-18-0379 (insoluble polycationic polymer; MW with 500 and < 1000); MW with 500 and 500 (est.)

with an unknown MP (P); S = Negligible (P); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO3; and TOC <2.0 mg/L.

Ecotox

Factors Comments

Environmental Hazard: Environmental hazard is relevant to whether a new chemical substance is likely to present unreasonable risk because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance. EPA estimated environmental hazard of this new chemical substance using predictions based on the negligible water solubility of P-18-0379 (insoluble polycationic polymer; MW with \$\infty\$ <500 and \$\infty\$ <1000). Acute and chronic toxicity values estimated no effects at saturation for fish, aquatic invertebrates and algae. These toxicity values indicate that the new chemical substance is expected to have low environmental hazard. An acute and chronic COC was not calculated, because the toxicity values show no effects at saturation.

Environmental Risk: